

2. (Amended) The dual mode device as recited in claim 1, wherein the dual mode unit outputs the cross product component when the first signal indicates generation of the cross product component and wherein the dual mode unit outputs the dot product when the first signal indicates generation of the dot product.

A1

3. (Amended) The dual mode device as recited in claim 1, wherein the dual mode controller receives a second signal for indicating the cross product component to be generated and selects the vector components for evaluating the cross product component in response to the second signal.

Sub B3  
A2  
18. (Amended) In a computer system having a graphics subsystem comprising a dual mode device, the dual mode device comprising a dual mode controller and a dual mode unit, a method for generating a cross product or a dot product from a first vector and a second vector, the first vector having a first set of components and the second vector having a second set of components, the method comprising:

receiving the first and second vectors for generating a cross product component or a dot product at the dual mode controller;

receiving a first signal indicating whether to generate a cross product component or a dot product at the dual mode controller;

selecting vector components for evaluating the cross product component or the dot product in response to the first signal;

sending the selected vector components to the dual mode unit; and

in response to the first signal and the selected vector components, generating the cross product component when the first signal indicates generation of the cross product component and generating the dot product when the first signal indicates generation of the dot product.